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WO 02/00907 A1

(54) Title: METHOD FOR STABLE CHROMOSOMAL MULTI-COPY INTEGRATION OF GENES

(57) Abstract: The present invention solves the problem of integrating multiple copies of a gene of interest by homologous recombination into well defined positions adjacent to conditionally essential genes in a bacterial host strain chromosome, which already comprises at least one copy of the gene of interest in a different position.

10022.204-WO.ST25
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Olsen, Carsten

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<212> DNA

<213> Artificial Sequence: Primer

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<211> 32

<212> DNA

<213> Artificial Sequence: Primer

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<211> 28

<212> DNA

<213> Artificial Sequence: Primer

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<211> 58

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<211> 1500

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<211> 32

<212> DNA

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<210> 40

<211> 65

<212> DNA

<213> Artificial Sequence: Primer

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<211> 31

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<211> 4078

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<210> 46
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<210> 47

<211> 45

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<213> Bacillus licheniformis

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/DK 01/00436

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: C12N 15/90, C12N 15/68, C12N 15/67 // C12N 15/75
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 9941358 A1 (NOVO NORDISK A/S), 19 August 1999 (19.08.99) --	1-66
A	EP 0185512 A1 (NOVO INDUSTRI A/S), 25 June 1986 (25.06.86) --	1-66
A	EP 0972838 A1 (ROCHE DIAGNOSTICS GMBH), 19 January 2000 (19.01.00) --	1-66

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
23 November 2001	27 -11- 2001
Name and mailing address of the ISA/ Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Facsimile No. +46 8 666 02 86	Authorized officer Yvonne Siösteen/EÖ Telephone No. +46 8 782 25 00

INTERNATIONAL SEARCH REPORT

Information on patent family members

06/11/01

International application No.
PCT/DK 01/00436

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